
The Year 2008

A Breakthrough Year for Health Protection from Climate Change?

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The Year 2008 saw a major step forward by the global health community in its engagement with climate change. Within the last year, WHO Director General Margaret Chan has repeatedly highlighted this issue as one of the top priorities for global public health,¹ and selected the issue as the theme for World Health Day 2008. Most importantly, the 193 countries represented at the 2008 World Health Assembly, gave unanimous and outspoken support for a new resolution calling for greater engagement on this issue.^{2,3} This resolution requests WHO to further strengthen its existing program of support to countries, and to ensure that health is fully represented within the international climate change debate.

At the global level, the magnitude of this challenge is becoming ever clearer. Climate change will affect, in profoundly adverse ways, the basic requirements for maintaining health: clean air and water, viable food crops, and adequate shelter. Each year, about 800,000 people die from causes attributable to urban air pollution, 1.7 million from lack of access to clean water and sanitation, 3.5 million from malnutrition, and approximately 60,000 in weather-related natural disasters.⁴⁻⁶ A warmer and more variable climate threatens to lead to higher levels of some air pollutants; increase transmission of diseases from poor water, sanitation, and hygiene; and increase the hazards of extreme weather. Taken together, climate change threatens to slow, halt, or reverse the progress that the global health community is now making against many of these hazards.

In the long run, however, the health impacts from the gradual build-up of pressure on the natural, economic, and social systems that sustain health, and which are already under stress in much of the developing world, may contribute as much, if not more, as acute shocks such as natural disasters or disease epidemics. These slow stresses include reductions and seasonal changes in the availability of fresh water, regional drops in food production, and rising sea levels. Each of these changes has the potential to force population displacement and to increase the risks of civil conflict.⁷

Health effects are expected to be more severe for elderly people and people with infirmities or pre-

existing medical conditions. Two additional groups are also likely to bear resulting health burdens: children and the poor. The major diseases that are most sensitive to climate, and therefore to climate change—diarrhea, malaria, and infections associated with undernutrition—are childhood diseases of poverty. The gaps in health outcomes we are now trying so hard to address may grow even greater, and the populations that are most vulnerable may paradoxically be those that have made the least contribution to the greenhouse gases that are causing climate change.⁸

The global public health community has a common interest in facing up to health risks wherever they occur in the world. Ongoing climate change, coupled with globalization, will make it more difficult to control infectious diseases within their current ranges. Health challenges arising from population displacement and conflict are unlikely to stay confined within national borders. Improved health conditions for all populations, alongside faster and more effective international disease surveillance, constitute a vital contribution to global health security.

In order to respond to this challenge, WHO has identified five strategic objectives in the support that it gives to Member States.

1. **Evidence.** WHO and its partners will continue to collect evidence on the health effects of climate change, through updated assessments of the attributable burden of disease both now and in future decades. It will pay increasing attention to evaluating the effectiveness of specific interventions aiming to contain impacts on health.
2. **Advocacy.** The health sector must add its voice to the growing concern, and make it clear that an additional justification for taking action on climate change is not environmental or economic, but the need to protect and enhance human health and well-being. This includes engagement with the public, and also ensuring that health is fully represented in the global climate change negotiations and funding mechanisms that are now being established.
3. **Adaptation.** There is a need for increased investment in selected public health functions that will improve health now, and reduce future vulnerability to climate change. WHO will support adaptation planning, in particular the enhancement of preparedness and response to extreme climate-related

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events such as heatwaves, floods, and storms; the improvement of population-vulnerability assessment to better direct responses by health systems and related sectors; and the identification of specific interventions in selected locations, including, for example, the enhancement of surveillance and control systems for climate-sensitive diseases and the strengthening of integrated vector-management approaches to control vectorborne diseases.

- Mitigation.** In many countries, climate change is prompting a reconsideration of energy choices, consumption patterns, and lifestyles. This presents an important strategic opportunity, as many of the measures that could reduce greenhouse gas emissions—such as the use of cleaner energy sources for power generation, for transportation, and in the home; and urban planning that enables safe and efficient use of active and public transport rather than reliance on cars—could carry important health co-benefits. These include potential reductions in the 800,000 deaths per year from outdoor air pollution, the 1.5 million from indoor air pollution, the 1.9 million for physical inactivity, and the 2.6 million from obesity.⁴ WHO will support the use of tools such as cost-benefit analyses and Health Impact Assessment, positioning health improvement as a strong and immediate motivation for the same policy and lifestyle changes that will also reduce greenhouse gas emissions.
- Leading by example.** The health sector is one of the most trusted and respected sections of society, and it is also one of the largest employers and consumers of energy. This presents both a responsibility and an opportunity to be an “early mover” to achieve climate-neutrality in its own operations, and to demonstrate that this can go hand-in-hand with improved effectiveness and cost savings.

The papers in this special issue of the *American Journal of Preventive Medicine*^{9–20} make a comprehensive and articulate analysis of all the different aspects of climate change affecting health. This is particularly important. The public health community needs to be proactive, showing the evidence and the links and involving the health sector in the societal response to climate change. The health sector needs to understand that it will have to deal with many of the repercussions of global climate change and to try for its part to avert aggressive risks before adverse health occurs. This includes engagement at every stage of prevention—from promoting the mitigation of greenhouse gas emissions, to adaptation planning, to preparation for diagnosis and treatment of currently unfamiliar diseases.

Climate change is an unprecedented challenge, one that cannot be met by any one agency or country acting alone. We will need a greater degree of global collaboration, and shared purpose, than we have ever seen.

The World Health Assembly resolution embodies this commitment at the global level, and defines a common agenda for action. The most critical part of this resolution is probably not the request to WHO, but a call on the health community within Member States to show leadership, and to plan and implement their own actions within countries. It is now up to the public health community to follow through on this request, and this opportunity, to safeguard and improve public health in the face of climate change.

The views expressed in this article are those of the authors and do not necessarily reflect the position of the World Health Organization.

No financial disclosures were reported by the authors of this paper.

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